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DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
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SITE INVESTIGATION &
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May 19, 2015

Mr. Craig Caldwell
The National Railroad Passenger Corporation
Wilmington Maintenance Facility
4001 Vandever Avenue
Wilmington, DE 19801

Mr. Steve Baggett
Stantec
1060 Andrew Drive, Suite 140
West Chester, PA 19380

RE: Response to Comments on Supplemental Focused Feasibility Study Report
Amtrak Former Fueling Facility (DE-0266)

Dear Mr. Caldwell and Mr. Baggett:

The Department of Natural Resources and Environmental Control – Site Investigation and Restoration Section (DNREC-SIRS) and the United States Environmental Protection Agency Region III Land and Chemicals Division (USEPA R3 LCD) have received and reviewed the "Response to Comments on Amtrak and APU's Supplemental Focused Feasibility Study Report for the Amtrak Former Fueling Facility" prepared by Stantec Consulting Services, Inc. (Stantec) on behalf of Amtrak and American Premier Underwriters, Inc. (APU), and submitted on April 14, 2015. A detailed review of the responses by both Agencies is provided below.

As a general summary, the Agencies want to emphasize that all comments submitted to Amtrak and APU are a joint Agency effort and represent the position of both Agencies. As such, the Agencies appreciate Amtrak's and APU's willingness to collect additional soils data to fill data gaps affecting remedial decision-making, and to pursue additional bench and pilot scale testing to demonstrate that in situ stabilization will be effective for the drainage ditch sediments. Based on the responses provided, it would appear that there is some confusion regarding acceptable soil remedies for PCB contamination, as well as the role of risk assessment. To clarify, Amtrak and APU have two choices to develop PCB cleanup standards for site soils: use the existing 40 CFR § 761.61(a) cleanup standards for high occupancy, or back-calculate risk-based remedial goals utilizing applicable exposure parameters, taking into account cumulative risk of all site contaminants (refer to *Risk Assessment Guidance for Superfund, Volume 1 – Part B, Development of Risk-Based Preliminary Remediation Goals*). A forward risk assessment alone, as provided in the Supplemental Focused Feasibility Study, does not provide numerical risk-based cleanup goals.

Detailed Review

1. Summary of Agencies' Comments and Agencies' Path Forward, Apparent Rejection of Risk-Based Remediation Allowed by 40 CFR 761.61(c)

This response states:

> ". . . Amtrak and APU proposed a risk-based remedy for upland soils consistent with the risk-based requirements set forth in HSCA and in 40 CFR 761.61(c). A remedy that is developed consistent with a risk assessment and risk reduction process under HSCA should be acceptable under the risk-based procedure provided at 40 CFR 761.61(c). Nevertheless, EPA Region III insists, without providing an explanation, that the upland soils are subject to the self-implementing procedure under 40 CFR 761.61(a)."

DNREC/EPA Review of Amtrak General Response:

> The response statements above are factually incorrect. Amtrak and APU did not propose a risk-based remedy because no alternative in Section 4.0 of the SFFS included back-calculated PCB soil remediation goals (please refer to *Risk Assessment Guidance for Superfund, Volume 1 – Part B, Development of Risk-Based Preliminary Remediation Goals* for guidance on calculations). Calculating forward risk, as summarized in Section 1.10.1.7 of the SFFS, only characterizes risk should the exposure occur; forward risk calculations do not provide risk-based remedial goals, which must be back-calculated using applicable exposure parameters. Page 83 of the SFFS stated the following: "However, self-implementing PCB remediation criteria are also included in the development of remedial alternatives at the request of USEPA." Based on this statement and since the majority of the concentrations proposed in the Section 4.0 Alternatives are cleanup standards provided in § 761.61(a), EPA and DNREC had to assume that Amtrak's intent was actually using the § 761.61(a) cleanup standards. EPA Region III did not "insist" on the use of the § 761.61(a) cleanup standards; these standards were utilized in the soils remedial alternatives proposed by Amtrak in the SFFS. Finally, Amtrak's chosen alternative utilizes a PCB concentration (500 mg/kg) that is neither a § 761.61(a) cleanup standard nor the result of a risk-based remedial goal calculation, and so is unacceptable.
>
> To summarize, Amtrak and APU have two choices to develop PCB cleanup standards: use the existing § 761.61(a) cleanup standards for high occupancy, or back-calculate risk-based remedial goals utilizing applicable exposure parameters, taking into account cumulative risk of all site contaminants (refer to *Risk Assessment Guidance for Superfund, Volume 1 – Part B, Development of Risk-Based Preliminary Remediation Goals*).

2. Summary of Agencies' Comments and Agencies' Path Forward, Apparent Rejection of Risk-Based Remediation Allowed by 40 CFR 761.61(c)

This section states:

> "In addition, EPA claims that Amtrak and APU are subject to remedies under TSCA's PCB regulations, but at the same time requires additional testing of PAHs and BTEX as part of the HHRA. EPA's TSCA PCB regulations at 40 CFR Part 761 do not apply to PAHs and BTEX . . . "

DNREC/EPA Review of Amtrak General Response:

(a) DNREC's March 17, 2015 letter states on p. 2: "DNREC-SIRS comments are incorporated herein, or are incorporated in the attached comments," which include all HHRA comments. The DNREC Site Investigation and Restoration Section has the regulatory authority to require investigation and cleanup of all site contaminants of concern. DNREC-SIRS cannot approve a HHRA or remedial goals that exclude contaminants of concern.
(b) As stated above, risk-based remedial goals for PCB cleanups under TSCA regulations must take into account cumulative risk.

3. Proposed Path Forward

DNREC/EPA Review of Amtrak Proposed Path Forward:

(a) Updating the human health risk assessment with the data to be collected will only be useful to the Agencies for the allowable use scenario of the Site, which is industrial and construction. Amtrak's "Actual Exposure" scenario is not acceptable.
(b) The submission of a Revised SFFS Report will only be acceptable if it includes either the § 761.61(a) PCB cleanup standards for high occupancy, and/or back-calculated risk-based remedial goals utilizing applicable exposure parameters, taking into account cumulative risk of all site contaminants (refer to *Risk Assessment Guidance for Superfund, Volume 1 – Part B, Development of Risk-Based Preliminary Remediation Goals*).
(c) The completion date of July 1, 2016 for the Revised SFFS Report appears overly delayed, since the additional bench-scale ISS testing could begin in the fall of 2015. March 2016 is requested by the Agencies for completion.

4. Attachment 1, Point by Point Responses, Supplemental Focused Feasibility Study Report
It must be emphasized that the specific risk assessment comments represent the positions of both EPA Region III and DNREC-SIRS. The Amtrak responses frequently single out EPA Region III. Amtrak and APU should be aware that these comments are the position of both Agencies.

Amtrak Responses to Comments 1a, 5d, 6 and 12a

The Agencies stand by the original comment that the results of a risk assessment do not support any specific risk management options; the results only indicate whether corrective measures are necessary. This assertion is consistent with both the NCP and

TSCA regulations, and the statement does not "dismiss" the HHRA as stated in this response. It should also be noted that the Amtrak HHRA is incomplete, since risk-based remedial goals were not calculated.

Amtrak Responses to Comments 1b, 5b and 12a

The Agencies stand by the position that the "Actual Exposure" conditions cannot be used as the basis of the Remedial Action Objectives. The responses state an intention to impose an environmental covenant consistent with the exposure assumptions. However, an environmental covenant cannot be used to reliably control worker activity patterns or set non-engineered bounds on land use; nor could such an approach meet the HSCA criteria or the TSCA requirement that the risk-based method will not pose an unreasonable risk of injury to health or the environment.

Amtrak Responses to Comments 2 – 5a, 5c, 13a, 30, 31, 33, 34, 36, 37

The proposed additional soil sampling is appreciated by the Agencies.

Amtrak Responses to Comments 8 and 11

"Subsurface contamination" in the original comments refers to the LNAPL on the very shallow water table in the Former Fueling Facility. This is a subsurface source for indoor air vapor intrusion that must be taken into account for all future buildings, by installing vapor barriers.

Amtrak Responses to Comments 9, 14, and 16a

The SFFS did not propose any risk-based remedial goals for PCB soil clean-up and used the § 761.61(a) cleanup levels for the alternatives analysis. Thus, the Agencies assumed Amtrak and APU intended to use the § 761.61(a) process.

Amtrak Response to Comment 12b

(a) The Agencies stand by the position that the primary remedial goal for soils must be protection of human health.

(b) This Amtrak response states "To the contrary, however, Region III's proposal to excavate and dispose of such soils offsite would have significant adverse environmental impacts that are unique to that alternative remedy . . ." As stated before, all comments provided to Amtrak represent the positions of both DNREC and EPA. Secondly, EPA Region III did not initiate remedial proposals, but instead commented upon Amtrak's alternatives, almost all of which used the § 761.61(a) cleanup levels. Finally, it is not accurate to describe soil excavation and offsite disposal, a standard remedial technique, as having significant adverse environmental impacts. Straight-forward procedures are commonly used to conduct these activities safely with no release of contaminants.

Amtrak Response to Comment 12c

The Agencies stand by the original comment.

Amtrak Response to Comment 13b

Refer to the Comment (1) Agency Review of Amtrak General Response above.

Amtrak Response to Comment 15

Each remedy is a site-specific decision that is not bound by previous § 761.61(c) decisions (the only applicable authority cited in this response).

Amtrak Response to Comment 16b

(a) The SFFS did not propose any risk-based remedial goals for PCB soil clean-up and used the § 761.61(a) cleanup levels for the alternatives analysis. Thus, the Agencies assumed Amtrak and APU intended to use the § 761.61(a) process.

(b) Depending on remaining subsurface concentrations and/or the use of foundations as caps, clean corridors would be a remedy requirement independent of Amtrak's design phase or long-term stewardship plan.

Amtrak Response to Comment 17

This response is confusing, as it directly contradicts what is written in Section 3.5.6 of the SFFS. The Agencies stand by the original comment as it pertains to Section 3.5.6.

Amtrak Response to Comment 18

This response is confusing, because Alternative S-2 proposed by Amtrak in the SFFS is identical to the § 761.61(a) low occupancy requirements, and no risk basis was provided for the cleanup levels; thus, the Agencies responded accordingly. The Agencies stand by the original comment and request acknowledgement from Amtrak that Amtrak's proposed S-2 Alternative is identical to the § 761.61(a) low occupancy requirements.

Amtrak Response to Comment 19

This response is confusing, because Alternative S-3 proposed by Amtrak in the SFFS uses § 761.61(a) low occupancy cleanup levels, and no risk basis was provided for the cleanup levels; thus, the Agencies responded accordingly. The Agencies stand by the original comment and request acknowledgement from Amtrak that Amtrak's proposed S-3 Alternative relies on § 761.61(a) low occupancy cleanup levels.

Amtrak Response to Comment 20

This response is not responsive to the original comment. Alternative S-4 utilized inappropriate § 761.61(a) cleanup levels, and did not propose a risk-based remedial goal; thus, the Agencies responded accordingly. The Agencies request that Amtrak acknowledge these facts.

Amtrak Response to Comment 21

This response is not responsive to the original comment. Alternatives S-5 and S-6 utilized inappropriate § 761.61(a) cleanup levels, and did not propose a risk-based

remedial goal; thus, the Agencies responded accordingly. The Agencies request that Amtrak acknowledge these facts.

Amtrak Response to Comment 22

(a) This response states that "Remedial action goals were developed considering the contaminants of concern as well as the exposure routes and receptors. The goals consider the current and future uses of the site, the use and level of contamination of surrounding properties, facility-specific risk assessments, and applicable laws and regulations." The basis of these statements is unclear, because no risk-based remedial goals for soil PCBs were calculated for Alternative S-7, or any other alternative in the SFFS. The Agencies request that Amtrak acknowledge the fact that no risk-based remedial goals were calculated in the SFFS.

(b) This response states that Alternative S-7 was selected as the recommended remedial alternative, and will be equally protective to human health and the environment as the other alternatives. However, Alternative S-7 essentially proposes to create an unregulated landfill on site for high concentration (and therefore high risk) PCB-contaminated soil, up to 500 mg/kg, nearby environmentally sensitive water bodies. This proposal does not satisfy the HSCA criteria, or the TSCA requirement that the risk-based method will not pose an unreasonable risk of injury to health or the environment.

Amtrak Response to Comment 23

This response is not responsive to the original comment. The comment states that Alternative S-8 is not consistent with either of the two choices available for PCB cleanup: § 761.61(a) high occupancy cleanup levels/conditions; or back-calculated risk-based remedial goals. The response does not address this fact.

Amtrak Response to Comment 24

While the Agencies are not requesting detailed design specifications for the groundwater barrier at this time, a general description will be necessary for approval. Please provide a general description.

Amtrak Responses to Comments 25, 26, and 28

These responses are not responsive to the original comments. Please provide responses.

Amtrak Responses to Comments 27 and 29

These responses seem to agree that a site-specific, permanent barrier cap will be designed for the stabilized sediments and a protective cap will be used for erosion control if there is a new drainage feature. However, these responses also describe the development of remedial action goals which were not actually calculated and also are irrelevant for these remedies. The Agencies request that Amtrak acknowledge the fact that no risk-based remedial goals were calculated in the SFFS.

Amtrak Response to Comment 32

(a) This response states that remedial goals were developed for the alternatives; however, the SFFS alternatives pertaining to this comment employed either the § 761.61(a) low occupancy cleanup levels, or 500 mg/kg with no basis provided. The Agencies request that Amtrak acknowledge the fact that no risk-based remedial goals were calculated in the SFFS.

(b) This response states that Alternative 007-S4 was selected as the recommended remedial alternative, and will be equally protective to human health and the environment as the other alternatives. However, Alternative 007-S4 essentially proposes to create an unregulated landfill on site for high concentration (and therefore high risk) PCB-contaminated soil, up to 500 mg/kg, nearby environmentally sensitive water bodies. This proposal does not satisfy the HSCA criteria, or the TSCA requirement that the risk-based method will not pose an unreasonable risk of injury to health or the environment.

5. Attachment 1, Point by Point Responses, Appendix L, Human Health Risk Assessment 2014 Update

It must be emphasized that the specific risk assessment comments represent the positions of both EPA Region III and DNREC-SIRS. The Amtrak responses frequently single out EPA Region III. Amtrak and APU should be aware that these comments are the position of both Agencies.

Amtrak Response to Comment 35a

The Actual Exposure scenario only reflects the current and extremely limited worker activity, and does not represent reasonably anticipated future land use; thus, the Agencies stand by the original comment.

Amtrak Response to Comment 35b

This response agrees with the comment and includes the revised PEF calculations. The following errors were identified in the revised calculations:

(a) The number of days in Delaware with at least 0.01 inches of rainfall should have been obtained from Exhibit 5-2, from which the correct value is 140 days. Please revise accordingly.
(b) The assumption used for ΣVKT is incorrect: the area of surface soil contamination for the Former Fueling Facility is much greater than 0.5 acres. Please replace this value with the estimated acreage of surface soil contamination for the Former Fueling Facility.
(c) Using the default input of 0.5 acres for the Equation 5-6 Q/Csr calculation is also incorrect. Please replace with the estimated acreage of surface soil contamination for the Former Fueling Facility.

Amtrak Response to Comment 39

The Agencies agree with this response that the VF component of the inhalation calculations for PCBs may be removed, because only Aroclors 1221 and 1232 are considered volatile, and these lower chlorinated Aroclors were not detected in soils at the Former Fueling Facility. TPH, however, is considered volatile. The difficulty is there can be no single chemical-specific factors for a large group of individual chemicals, such as TPH. Instead, it is recommended to use an individual indicator chemical for TPH, such as naphthalene, for the VF component of the inhalation calculations.

If you have any questions, please direct them to the DNREC-SIRS site project manager, John G. Cargill IV.

Sincerely,

Timothy Ratsep
Program Administrator – DNREC-SIRS

Luis A. Pizarro
Associate Director – USEPA Region III

JGC/TTR:vdh
JGC15013.doc
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Attachments

pc: John G. Cargill, IV, DNREC-SIRS Project Manager
Qazi Salahuddin, DNREC-SIRS Program Manager
Richard Greene, DNREC Watershed Assessment Section
Bryan Ashby, DNREC Surface Water Discharges Section
Ruth Prince, Toxicologist, 3LC10, Land and Chemicals Division, USEPA Region III